

BEHAVIORAL ARMS CONTROL AND EAST ASIA



Recommended Citation

Ulrich Kühn and Heather Williams, "BEHAVIORAL ARMS CONTROL AND EAST ASIA", NAPSNet Special Reports, April 16, 2024, <https://nautilus.org/napsnet/napsnet-special-reports/behavior-l-arms-control-and-east-asia/>

BEHAVIORAL ARMS CONTROL AND EAST ASIA

ULRICH KÜHN AND HEATHER WILLIAMS

APRIL 16 2024

I. INTRODUCTION

In this essay, Ulrich Kuhn and Heather Williams suggest that a “Behavioral Arms Control” framework between China and the United States be used to reduce the risk of war by building confidence and developing bilateral arms control initiatives.

Ulrich Kühn is Director of the Arms Control and Emerging Technologies Program at IFSH, University of Hamburg. Heather Williams is the Director of the Project on Nuclear Issues at the Center for Strategic and International Studies.

This report is an input into the joint project on [Reducing the Risk of Nuclear Weapon Use in Northeast Asia \(NU-NEA\)](#) between the [Asia-Pacific Leadership Network \(APLN\)](#), the Nautilus Institute, and the [Research Center for Nuclear Weapons Abolition \(RECNA\)](#) at Nagasaki University.

It is published simultaneously by RECNA-Nagasaki University [here](#) (English) and by APLN [here](#)

This report is published under a 4.0 International Creative Commons License the terms of which are found [here](#).

The views expressed in this report do not necessarily reflect the official policy or position of the Nautilus Institute. Readers should note that Nautilus seeks a diversity of views and opinions on significant topics in order to identify common ground.

Acknowledgements: The authors would like to thank the two peer reviewers for their constructive feedback on an earlier draft of this commentary and the funding from Federal Foreign Office, Grant 'Research and Transfer Project Arms Control and Emerging Technologies (Phase II)' and the John D. and Catherine T. MacArthur Foundation, Grant 'Rethinking Nuclear Deterrence Network'

Image: U.S.-People’s Republic of China Defense Policy Coordination Talks at the Pentagon, January 9, 2024 from [here](#)

II. NAPSNET SPECIAL REPORT BY ULRICH KÜHN AND HEATHER WILLIAMS

BEHAVIORAL ARMS CONTROL AND EAST ASIA

APRIL 16 2024

Abstract

Growing political and military tensions between China and the United States make it necessary to think of novel arms control approaches on nuclear weapons and certain emerging technologies, designed to include China and other actors. This commentary makes the case for a Behavioral Arms Control (BAC) framework between China and the United States, stabilizing relations in East Asia. It builds on the recent behavioral turn in arms control and historical examples from the realm of confidence-building measures. It suggests informal initiatives to reduce military risks by focusing on the actions, rather than the capabilities, that can lead to escalation. In order to avoid nuclear use and war, BAC prescribes responsible behavior in multiple military domains, involving various nuclear and non-nuclear actors. After discussing the BAC concept and 'responsibility' in particular, the commentary lays out three principles for engaging China and subsequently offers a number of

possible arms control initiatives under a BAC framework.

Introduction

In November 2023, US President Joe Biden and the President of the People's Republic of China Xi Jinping met in San Francisco to discuss a host of security issues, including potential areas of cooperation. The outcome of the meeting was an agreement to keep talking about issues such as risks associated with emerging technologies and crisis escalation. Following the meeting, the official US readout of the meeting stated that Biden had

emphasized that the United States and China are in competition [and at the same time had] reiterated that the world expects the United States and China to manage competition responsibly to prevent it from veering into conflict, confrontation, or a new Cold War (The White House 2023b).

These talks present both an opportunity along with a challenge: How can the United States balance cooperation and competition with China, and what are areas of mutual interest that can help avoid conflict?

One of the biggest challenges is China's growing nuclear arsenal and continued resistance from Beijing to engage in bilateral arms control or strategic stability dialogues with the United States. A recent US Department of Defense report highlighted that China "is developing new [Intercontinental Ballistic Missiles] that will significantly improve its nuclear-capable missile forces and will require increased nuclear warhead production" (US Department of Defense 2023, VI). The report concluded: "Compared to the [People's Liberation Army's] nuclear modernization efforts a decade ago, current efforts dwarf previous attempts in both scale and complexity" (ibid., VIII). Additionally, the US intelligence community believes that Xi has ordered the Chinese military to be prepared for an invasion of Taiwan by 2027, although there are recent doubts about the ability to deliver on this (Hawkins 2023).

Throughout the Cold War, arms control proved to be a valuable tool for stabilizing the US-Soviet nuclear relationship in order to reduce the likelihood of nuclear war (Schelling and Halperin 1961). Balancing cooperation and competition, bilateral arms control eventually even contributed to a more trusting relationship (Krepon 2021). But traditional US approaches to arms control will be challenging with China for a host of reasons, including a strategic culture of opacity, along with an almost complete breakdown of arms control agreements with Russia in recent years that has undermined the credibility of arms control as a practice (Kühn 2021).

As we have argued elsewhere (Kühn and Williams 2023), a new approach to arms control is needed. This commentary makes the case for pursuing Behavioral Arms Control (BAC) with China. BAC is defined as informal initiatives to reduce military risks by focusing on the actions, rather than the capabilities, that can lead to escalation. In order to avoid nuclear use and war, BAC prescribes responsible behavior in multiple military domains—not just in the nuclear—involving various nuclear and non-nuclear actors.

This commentary has four sections. First, we explain why arms control as we know it is dead. Second, we lay out a conceptual framework for BAC. Third, we outline three principles for engaging China on BAC. Finally, we apply the BAC framework to identify specific arms control initiatives for the United States and China.

Our commentary demonstrates that BAC opens up a number of avenues for working with China to reduce risks that could lead to nuclear use. In doing so, it provides a policy agenda for exploring

BAC opportunities in various military domains. Additionally, it offers an important scholarly contribution to recent arms control research (e.g., Krepon 2021; Wisotzki and Kühn 2021; Kühn 2023) by developing a novel conceptual framework that also speaks to a growing body of IR scholarship on more flexible and informal approaches to international cooperation (e.g., Vabulas and Snidal 2013; Westerwinter, Abbott, and Biersteker 2020).

Why Arms Control Is Dead

Classical nuclear arms control is dead. From the early 1970s to the mid-1990s, the erstwhile superpowers—the United States and the Soviet Union—negotiated a dense network of formal and informal agreements limiting and reducing strategic, sub-strategic, and defensive nuclear arms (Krepon 2021). Since the beginning of the 21st century, that network eroded to a point where, by 2023, almost all previous agreements are either suspended, abrogated, or largely dysfunctional. There is no prospect for reviving or replacing this regime-type network or individual agreements. While in 2023 the United States expressed its “willingness to engage in bilateral arms control discussions with Russia [...] without preconditions” (The White House 2023a), the Russian response underscored that Moscow sees “no options [...] to continue or replace the New START Treaty” (Boikov 2023), the centerpiece of the former bilateral framework.

Historically, a world without US-Russian nuclear arms control is not new. After both sides had developed nuclear weapons programs, it took them over twenty years and a severe nuclear crisis in 1962 to start managing their nuclear competition by cooperative means. The “new nuclear age” of the 21st century (Narang and Sagan 2022), however, has some key differences to the Cold War, which make today’s non-arms-control era special, and perhaps less stable. To begin with, the new nuclear age is not bipolar, but driven by an increasing tripartite struggle between China, Russia, and the United States. The new nuclear consensus in Washington is that the United States is facing “a world where two nations [Russia and China] possess nuclear arsenals on par with our own [and where] the risk of conflict with these two nuclear peers is increasing” (Congressional Commission on the Strategic Posture of the United States 2023, VII). China had never been a part of the nuclear arms control architecture that is now in shambles.

A second key difference pertains to newfound perceptions that these three actors attach to the apparent nature of certain novel technologies preordaining conflict outcomes (Allen 2019; Nadibaidze and Miotto 2023). In particular, recent advances in the application of large language models employed in generative Artificial Intelligence (AI), coupled with increasing computing power and the availability of vast data sets, have sparked fears that an AI arms race, including in the military domain, is on (Meacham 2023). Whether AI—a dual-use technology in the very sense—lends itself to the kind of regulation that classical arms control pursued is questionable (Vaynman and Volpe 2023, 627-628). Finally, the ability of the US executive to conclude and keep formal international agreements, including on arms control, has greatly diminished due to deep-seated partisanship in U.S. Congress (Kühn 2021).

These three developments—nuclear multipolarity, technological advances, and domestic US gridlock—overlap and interact with renewed concerns over deliberate or inadvertent nuclear use. In 2022, heads of states and governments of the G20 proclaimed that “the use or threat of use of nuclear weapons is inadmissible” (G20 2022). The Ukraine War and Russia’s nuclear signaling accompanying it reminded world leaders that war in the nuclear age, and war including nuclear powers at that, could cross the nuclear threshold. A second concern pertains to a potential military clash between Chinese and US forces, with the US assessment being that China may deliberately select “nuclear strike targets to achieve conflict de-escalation and a return to a conventional conflict” (Congressional Commission on the Strategic Posture of the United States 2023, 12). A third concern flows from militaries’ potential pursuit of incorporating AI elements into their nuclear

command and control (C²) processes in order to react faster and perhaps more reliably in a crisis, thereby possibly lowering the threshold to nuclear use in inadvertent ways (Saltini 2023).

The Concept of Behavioral Arms Control

The combination of factors inhibiting the renewed pursuit of classical arms control and of reasons elevating the necessity for managing new nuclear risks make it seem prudent to pursue a novel approach for arms control, one that ultimately includes China, approaches AI risks and other emerging technologies in a viable manner, and avoids the legal aspects of US partisan haggling. Such a novel approach—we call it Behavioral Arms Control—is built on three pillars: informality, responsibility, and multidimensionality.

Informality: BAC would be informal, not requiring meticulously negotiated treaties with legally binding protocols or supporting international organizations. Instead, it would rely on joint or unilateral declarations, such as the US-Soviet/Russian Presidential Nuclear Initiatives (PNIs), which were unilateral and asymmetric reductions in tactical nuclear weapons at the end of the Cold War. This informal approach would also allow states to identify and tailor what restraints could work in tandem with deterrence postures and other national interests, allowing for greater flexibility.

Responsibility: BAC would first and foremost focus on military behaviors and activities, such as military maneuvers and exercises or deployments in certain geographic areas, instead of mere numbers of weapons, as counted under New START, for instance. It would thus have a conceptual closeness to confidence-building measures (CBMs), as put forward under agreements facilitated by the Organization for Security and Co-operation in Europe during the 1980s and 1990s. It would differ from classical CBMs, however, as it would put a premium on the concept of behaving responsibly^[1] in international affairs (Gaskarth 2017), meaning for the nuclear domain to abstain from behaviors that are generally seen as destabilizing, high-risk, and/or contributing to lowering the threshold to nuclear use. *Multidimensionality:* Arms control initiatives under a BAC framework would be multidimensional as regards scope and participation. Hence, BAC would particularly strive to open new arms control avenues for China and for other countries from East Asia and the Global South. In terms of scope, BAC initiatives would seek to reduce risks in the nuclear and non-nuclear domains, with a particular focus on certain emerging technologies, depending on what technologies interested states find common ground. To be clear, BAC initiatives must align with states national interests and produce meaningful constraints, and not be merely symbolic. Ultimately, the hope is that the combination of informality, responsibility, and multidimensionality could generate cooperative initiatives that may serve a bridge-building function until more formal arms control arrangements, potentially to include limits and reductions on specific weapons categories, become viable again in the future.

Since the early days of the Cold War, a shared interest in cooperation between the superpowers in preventing inadvertent nuclear war has been at the core of the intellectual concept of modern arms control (Schelling 1960: 260). That shared interest is still observable today as both Russia and the United States have tried to respect certain respective red lines in the Ukraine War. NATO allies have not openly entered the war as parties to the war and Russia has not attacked NATO (Freedman 2023). Closely linked to nuclear war prevention, is the tradition of nuclear non-use (Schelling 1960: 260; Paul 2010) and the nuclear taboo (Tannenwald 2007), recognized over decades. This key element of responsible international behavior was recently reinforced by the G20 states in their 2022 and 2023 summit declarations. Together, nuclear war prevention and non-use form the touchstone—in the sense of states' shared responsibility—of the BAC concept.

BAC does not necessarily question the principle of nuclear deterrence, as long as those deterrence practices would not contribute to lowering the threshold for nuclear use and/or making nuclear war more likely. Hence, BAC aims to take the most destabilizing activities off the table, ones that could

lead to or accelerate an acute military crisis from crossing the nuclear threshold. BAC operates on the basic assumption that in the nuclear age, there are certain behaviors that most militaries and political leaders—be they in Washington, Moscow, Beijing, or elsewhere—may ultimately find destabilizing because of the risks of misperception and/or inadvertent escalation. In a world that has become decidedly less cooperative and more prone to military conflict involving nuclear-armed states, BAC seeks to provide a best practices baseline to which states could add certain building blocks of responsible behavior.

The conundrum baked into the concept of BAC is one of political expediency. Who gets to decide which particular behavior is responsible, and whose interests are being served by making that decision? Recent years have seen a growth in informal initiatives, mostly led by the United States and its allies, establishing guidelines for responsible military behavior. In October 2021, NATO member states agreed on “Principles of Responsible Use for AI in Defense” (NATO 2021). Two months later, the United Nations General Assembly adopted a resolution, initiated by the United Kingdom, aimed at “Reducing space threats through norms, rules and principles of responsible behaviors” (United Nations 2021). In July 2022, France, the United Kingdom, and the United States issued a working paper on “Principles and responsible practices for Nuclear Weapon States” (United Nations 2022). Finally, towards the end of 2023, the United States put forward a “Political Declaration on Responsible Military Use of Artificial Intelligence and Autonomy” (US Department of State 2023b), which, by the end of 2023, has been endorsed by almost 50 states, not all of them close US allies. Together, these initiatives form what we call the ‘behavioral turn’ in arms control.

There are at least three approaches for states when deciding whether to engage with these informal behavioral initiatives or not. One comes from recent IR research on informal governance and centers around power. It posits that “informal international institutions impose fewer constraints on power and thereby increase the returns to power. This creates incentives for powerful players to favor informal arrangements” (Westerwinter, Abbott, and Biersteker 2021, 13). Accordingly, recent US-led initiatives on responsible behavior could, by design or unintentionally, mainly serve US interests and may hence fail to attract support from lesser powers and states opposing US leadership, such as, *inter alia*, China. The effects of power accumulation would be somewhat similar to the Cold War era. Back then, Hedley Bull (1976, 4) had observed that

While [...] Soviet-American cooperation in arms control serves universal purposes it inevitably serves special or bilateral purposes also. These special or bilateral purposes reflect the preference of the two great powers for a world order in which they continue to enjoy a privileged position.

The second, moral, perspective may come from the Ukraine War, which put on display how irresponsible behavior weakens international peace and security. While Russia employed numerous nuclear threats to try to coerce NATO into minimizing its support for Ukraine and pondered the possibility of nuclear use in its campaign against its neighbor (Freedman 2023), Washington showed restraint up to the point where White House deliberations transpired that in the case of Russian nuclear use against Ukraine, a possible US military response would not involve nuclear arms (Sanger and Tankersley 2022). While Washington upheld its New START obligations after Russia’s aggression against Ukraine, Russia suspended its treaty participation and followed up with de-ratifying the Comprehensive Nuclear-Test-Ban Treaty (CTBT). And while Washington and its allies engaged with leaders in Beijing and Delhi to influence Moscow’s nuclear calculus (Woodruff 2022), thereby paving the way for the G20 Bali Declaration of 2022, Russia introduced plans to prepare for nuclear weapons deployment to non-nuclear Belarus. For other states to realize that Russia’s reckless brinkmanship threatened to break the nuclear taboo, while the United States was emphatically committed to nuclear restraint, might provide a moral argument to support behavioral

arms control approaches.

A third perspective is purely transactional. Today, the United States is a country deeply invested in a mindset of *great power competition*, striving to be recognized internationally as a responsible actor. This new approach, at least under the Biden Administration, provides non-aligned states with potential leverage. The Ukraine War made it clear that Washington and its closest allies need the political and even economic support from key countries from the Global South, such as India, South Africa or Brazil (Mozur, Krolik, and Satariano 2023). If states from the Global South were to decide, on a case-by-case basis, to engage with US behavioral proposals, it would open up room to pragmatically influence how America and its allies define responsibility. In the end, BAC could gain wider international footing, making sure the interests of non-aligned states are included in the process of crafting informal behavioral arms control arrangements. No less so for countries in East Asia, taking a transactional perspective might usher in the realization that if the United States wants their support in its showdown with China, it will have to be more creative in keeping competition peaceful, including by the pursuit of novel arms control approaches.

Principles for Engaging China on Behavioral Arms Control

A BAC agenda would have to appeal to China to be more successful than previous US attempts at bilateral or multilateral arms talks with the People's Republic. Before discussing potential initiatives, we outline three principles that should guide the United States in pursuing BAC with China and explain why BAC could meet certain Chinese strategic objectives.

The first principle is simply recognizing that engaging China on arms control will require a novel US approach. During the Cold War, the United States and the Soviet Union regularly engaged in arms control dialogues to manage risks associated with strategic weapons, while continuing to compete in other areas. These arms control dialogues and agreements played an important regulatory and transparency function in an otherwise deeply competitive relationship and provided channels for strategic dialogue between Washington and Moscow. But engaging China on this kind of arms control might not work. According to a number of scholars, China views US bilateral arms control overtures as a tool for undermining China's deterrent (Hiim and Trøan 2022). As the US Strategic Posture Commission (2023, 11) rightly concluded, "China currently indicates no interest in negotiated risk reduction, strategic stability dialogue or arms control agreements that restrict its plans and will not agree to negotiations that diminish it or lock in U.S. or Russian advantages." At the same time, China is participating in over a dozen multilateral disarmament, arms control, and nonproliferation regimes while staying away from bilateral agreements that limit specific types of weapons (Meier and Staack 2022, 32). That is a clear indicator that Beijing is not *per se* opposed to arms control, but prefers certain topics and formats.

Recently, China has relaxed its stance on bilateral arms talks with the United States. Senior US and Chinese officials met in November 2023 to discuss arms control and nonproliferation, and again in January 2024 including military officials (US Department of State 2023a; US Department of Defense 2024). Allegedly one topic of discussion has been the role of AI in relation to nuclear weapons (Honrada 2023). This could indicate that there is interest on the Chinese side to discuss AI and perhaps other military-relevant emerging technologies. As a consequence, engaging China will require a reframing of arms control to take into account Beijing's (new) interests. BAC provides an important part of such a necessary reframing because it does not start with seeking verifiable limits or reductions to nuclear systems, a no-go for China. In the absence of US-Russian strategic reductions—which Washington should continue to seek notwithstanding its evolving strategic relationship with China—informal mechanisms under the BAC banner, including on certain emerging technologies, such as AI, may have a greater chance of success with China than formal, nuclear-only arrangements. If instead informal arrangements with a slightly different scope would work for both

sides, they could lay the groundwork for future cooperation that might one day even include more formal, nuclear agreements, perhaps similar to New START.

The second principle is making sure that so-called risk-reduction efforts are beneficial for both sides. During the Cold War, bilateral arms control did not always entail reductions of capabilities or mutual verification mechanisms, but sometimes aimed specifically at establishing crisis communication channels and general rules of the road to reduce the risk of unwanted military escalation. The U.S.-Soviet Incidents at Sea Agreement (INCSEA) from 1972, for example, established safety rules for American and Soviet military vessels, allowing commanders to provide guidelines to stand-down or avoid conflicts at sea (US Department of State 2009-2017a). China, however, has not shown a great interest thus far in adopting this kind of approach to the East Asian theater, highlighting that for Beijing “crisis prevention should take precedence over crisis management” (Permanent Mission of the People’s Republic of China 2023)—which is Chinese parlance for expressing dissatisfaction with US *freedom of navigation* missions in the waters surrounding China. On the other hand, China has already a risk-reducing missile launch notification exchange regime in place with Russia (Champlin 2009). An additional agreement with the United States would be beneficial for both countries.

The third and final principle is about international standing. In the past, the bilateral arms summitry between Washington and Moscow highlighted the prestige element to arms control. In an abstract sense, these public displays of responsible behavior were also designed to convey a global message: Arms control is just what responsible great powers do. Or as Bull (1980, 446) had put it succinctly, “Great powers cannot expect to be conceded special rights if they do not perform special duties.” As China embarks on becoming a global leader on par with the United States, particularly representative of many countries in the Global South that advocate for arms control and disarmament, BAC could provide additional opportunities for Beijing to be recognized as a responsible great power (Zhao 2020, 75-76). China’s interest in speaking on behalf of countries in the Global South should be picked up by Washington and advanced through its own multilateral initiatives on responsible military behavior. Ideally, both powers would positively compete in appealing to countries of the Global South by putting forward behavioral proposals.

Initiatives Under a Behavioral Arms Control Framework

Building on these three principles, we now apply the BAC framework to identify specific arms control initiatives for the United States and China and how these potentially enhance stability in the East Asian region. What we offer here is a three-pronged approach, which includes bilateral behavioral initiatives, efforts to strengthen strategic stability, and multilateral declarations and fora. None of these lines of effort are mutually exclusive, but can all be pursued in tandem, building off of the 2023 San Francisco Summit. For all of these initiatives, US leadership is essential.

Bilateral behavioral initiatives: Targeting nuclear C² systems with cyber-attacks or attacking early-warning satellites early in a crisis would count as destabilizing behavior. How to disincentivize this kind of high-risk behavior is worth exploring by both sides. The same could be said about cyberattacks on critical civilian infrastructure, such as ports, major electric grids, and hospitals. Then, there is the reported US-Chinese convergence on AI and nuclear C² (Kimball 2023). Even though the sides did not agree on specifics in San Francisco, making sure that delegating certain nuclear C² decisions to powerful AI systems without human oversight does not become accepted behavior should be high on the list of bilateral initiatives. Here, the United States can already build on its recent behavioral guidelines for military use of AI (U.S. Department of State 2023b). Also, there is an interest in Washington to ban test-launching missiles and their payloads into low Earth orbit so that they can reach targets from unexpected directions (Congressional Commission on the Strategic Posture of the United States 2023, 86). In 2021, China demonstrated this capability combining a Fractional Orbital Bombardment System (FOBS) with a hypersonic glide vehicle (Gupta

2023). A bilateral pledge not to further pursue and test this niche technology—short of a FOBS ban—could be considered. Finally, both sides could pursue unilateral, though coordinated, measures without having to codify them. The PNIs, mentioned before, are a good example of how such non-binding measures could serve a mutual interest, and allow Washington and Beijing to take a ‘gift basket’ approach with unilateral and flexible offers of restraint.

Strengthening strategic stability: As noted earlier, China and Russia notify each other about planned ballistic missile launches. So do the United States and Russia under the 1988 Ballistic Missile Launch Notification Agreement, which requires both sides to notify each other in advance of planned launches of Intercontinental Ballistic Missiles and Submarine-Launched Ballistic Missiles (US Department of State 2009-2017b). Recent reports suggest that Washington is considering a missile launch notification framework with China (Nakamura 2023), which might help consolidate this form of responsible behavior. Beyond that, discussing each other’s nuclear and military doctrines would contribute to better understanding certain behaviors. As an example, the purported Chinese nuclear buildup is perceived in Washington as an indication that China is moving away from its no-first-use policy (Congressional Commission on the Strategic Posture of the United States 2023, 12)—a view that is vehemently rejected in Beijing. Both sides could aim to clarify their contending views by speaking eye to eye about their respective doctrines. Another opportunity to strengthen strategic stability would be to agree to limiting fissile material production, separate from the diplomatic challenges of a Fissile Material Cutoff Treaty, to provide assurances that neither side is interested in an arms race. Finally, Washington should put on the table a possible statement recognizing that both countries are in a state of mutual vulnerability. What has been a military reality for decades has failed the public policy test due to concerns by U.S. allies in the Indo-Pacific. Here, Washington should revisit its own Cold War history of carefully balancing assurances to US allies in Western Europe with recognizing mutual vulnerability vis-à-vis the Soviet Union and consider how these lessons could be applied to current relations with China.

Multilateral declarations and fora: The two statements by heads of states and governments of the G20 in 2022 and 2023 on the inadmissibility of the use or threat of use of nuclear weapons help serve the purpose of strengthening the nuclear taboo. They should become a regular summit routine, involving both China and the United States. At the same time, the G20, in addition to the UN disarmament machinery, could become a forum for exploring certain behavioral initiatives jointly with key countries from the Global South and other countries in East Asia. In light of Russia’s recent de-ratification of the CTBT and continued US and Chinese resistance to ratify the treaty in the first place, a potential multilateral declaration to strengthen the no-test norm, perhaps in the P5 format (China, France, Russia, the United Kingdom, and the United States) might also be worth exploring.

A second multilateral line of effort would be to encourage China to engage more in informal multilateral efforts to promote transparency, verification, and irreversibility in nuclear disarmament. First and foremost, among these is the International Partnership for Nuclear Disarmament Verification (IPNDV), which brings together dozens of states to explore technical verification opportunities and challenges in nuclear disarmament. Because of its focus on technical issues, the initiative tends to avoid political sensitivities and has widespread support among non-nuclear weapon states, though China continues to abstain from participating in IPNDV, having observed the first phase of the Partnership. Contrary to its stance on IPNDV, China participates in the US-initiated Creating the Environment for Nuclear Disarmament (CEND) framework. Historically, China has been reticent to join verification initiatives that could eventually lead to greater transparency. It is unclear if that stance is changing, but China’s participation in initiatives with a technical focus, like CEND or perhaps others, should be an opportunity to build engagement. Another opportunity would be the relatively new effort on Irreversibility and Nuclear Disarmament (IND), led by the

United Kingdom and Norway. The goals of this initiative are to explore the technical, political, and legal issues around irreversibility of nuclear disarmament. IND, too, has widespread involvement and interest from among countries of the Global South (Rodgers and Williams 2023). China could begin by joining discussions, along with offering substantive contributions about what levels of irreversibility would be suitable in any arms control or disarmament agreement.

Conclusions

The almost complete breakdown of US-Russian arms control and growing military tensions in East Asia highlight the need for balancing competition with renewed cooperative efforts, particularly between the United States and China. Chinese skepticism towards traditional bilateral arms control, which Washington has favored for over fifty years, makes it necessary to try something new. BAC—a framework built on informality, responsibility, and multidimensionality—may identify original incentives and opportunities for engaging Beijing, other countries in East Asia, and even certain countries from the Global South more successfully. The recent carefully curated arms control overtures between Washington and Beijing could provide a starting point.

To be sure, there are plenty of reasons to be skeptical. As many have suggested, China might simply not be interested in bilateral arms control with the United States *per se* (Hiim and Trøan 2022); and even if there is some limited interest in arms control on both sides, this interest does not necessarily have to overlap, for US and Chinese security interests are often diametrically opposed. Any bilateral arms control with China may also raise concerns among US allies in the Indo-Pacific, particularly South Korea and Australia, that China could use arms control in an attempt to drive a wedge between the United States and its allies (Crawford and Vu 2021). And countries such as North Korea may simply prefer to stay out of any cooperative business. Meanwhile, countries of the Global South—which is not a unitary bloc but consists of many states with rather diverse interests—may perceive BAC as an effort to force them to take sides in *great power competition*. Finally, a possible re-election of Donald Trump could fundamentally alter US perspectives on global affairs.

The recent behavioral turn, elevating responsible behavior in military affairs and being led by the United States and its allies, provides a policy foundation to explore under what conditions behavioral initiatives could contribute to producing global public goods in the arms control domain. From an East-Asian perspective, the cautious thaw in US-Chinese arms control relations provides a possible opening to pursue cooperation on different topics, of which we outlined a number of promising avenues. As regards future scholarly contributions, the behavioral turn in arms control opens up opportunities for further research on, *inter alia*, institutional informality and the agenda-setting power of various actors in the new nuclear age.

References

Allen, G. C. 2019. "Understanding China's AI Strategy: Clues to Chinese Strategic Thinking on Artificial Intelligence and National Security." *Center for a New American Security*. February 2019. http://www.globalhha.com/doclib/data/upload/doc_con/5e50c522eeb91.pdf.

Boikov, S. 2023. "Я не думаю, что отношения России и НАТО восстановятся [I Don't Think that Relations Between Russia and NATO Will Be Restored]." *Известия из*. November 29, 2023. <https://iz.ru/1612456/sem-en-boikov/ia-ne-dumaiu-cto-otnosheniia-rossii-i-nato-vostranoviatsia>.

Bull, H. 1976. "Arms Control and World Order." *International Security* 1 (1): 3-16. <https://doi.org/10.2307/2538573>.

Bull, H. 1980. "The Great Irresponsibles? The United States, the Soviet Union, and World Order."

International Journal 35 (3): 437–447. <https://doi.org/10.1177/002070208003500302>.

Champlin, L. 2009. “China, Russia Agree on Launch Notification.” *Arms Control Today*. November 2009. <https://www.armscontrol.org/act/2009-11/china-russia-agree-launch-notification>.

Congressional Commission on the Strategic Posture of the United States. 2023. *America’s Strategic Posture: The Final Report of the Congressional Commission on the Strategic Posture of the United States*. <https://armedservices.house.gov/sites/republicans.armedservices.house.gov/files/Strategic-Posture-Committee-Report-Final.pdf>.

Crawford, T. W., and K. X. Vu. 2021. “Arms Control as Wedge Strategy: How Arms Limitation Deals Divide Alliances.” *International Security* 46 (2): 91–129. https://doi.org/10.1162/isec_a_00420.

Freedman, L. 2023. “The Russo-Ukrainian War and the Durability of Deterrence.” *Survival* 65 (6): 7–36. <https://doi.org/10.1080/00396338.2023.2285598>.

G20. 2022. *G20 Bali Leaders’ Declaration*. Bali, Indonesia. <https://www.bundesregierung.de/resource/blob/997532/2143366/2d83f07f195e98a12f1f7659dacea285/2022-11-16-g20-declaration-data.pdf?download=1>.

Gaskarth, J. 2017. “Rising Powers, Responsibility, and International Society.” *Ethics and International Affairs* 31(3): 287–311. <https://doi.org/10.1017/S0892679417000211>.

Gupta, R. 2023. “Orbital Hypersonic Delivery Systems Threaten Strategic Stability.” *Bulletin of the Atomic Scientists*. June 13, 2023. <https://thebulletin.org/2023/06/orbital-hypersonic-delivery-systems-threaten-strategic-stability/>.

Hawkins, A. 2023. “Taiwan Foreign Minister Warns of Conflict with China in 2027.” *The Guardian*. April 21, 2023. <https://www.theguardian.com/world/2023/apr/21/taiwan-foreign-minister-warn-of-conflict-with-china-in-2027>.

Haydon, G. 1978. “On Being Responsible.” *The Philosophical Quarterly* 28 (110): 46–57. <https://doi.org/10.2307/2219043>.

Hernández, G. R., and D. G. Kimball. 2022. “Russia Blocks NPT Conference Consensus Over Ukraine.” *Arms Control Today*. September 2022. <https://www.armscontrol.org/act/2022-09/news/russia-blocks-npt-conference-consensus-over-ukraine>.

Hiim, H. S., and M. L. Trøan. 2022. “Hardening Chinese Realpolitik in the 21st Century: The Evolution of Beijing’s Thinking about Arms Control.” *Journal of Contemporary China* 31 (133): 86–100. <https://doi.org/10.1080/10670564.2021.1926095>.

Honrada, G. 2023. “US, China at Critical Odds on Future of Military AI.” *Asia Times*. November 17, 2023. <https://asiatimes.com/2023/11/us-china-at-critical-odds-on-future-of-military-ai/>.

Kimball, D. G. 2023. “The US and China Re-Engage on Arms Control. What May Come Next.” *Bulletin of the Atomic Scientists*. November 15, 2023. <https://thebulletin.org/2023/11/the-us-and-china-re-engage-on-arms-control-what-may-come-next/#post-heading>.

Krepon, M. 2021. *Winning and Losing the Nuclear Peace: The Rise, Demise, and Revival of Arms Control*. Stanford, CA: Stanford University Press.

Kühn, U. 2021. “The Crisis of Nuclear Arms Control.” *Zeitschrift für Friedens- und Konfliktforschung*

10 (2): 319–344. <https://doi.org/10.1007/s42597-022-00069-5>.

Kühn, U., and H. Williams. 2023. “A New Approach to Arms Control: How to Safeguard Nuclear Weapons in an Era of Great-Power Politics.” *Foreign Affairs*. June 14, 2023. <https://www.foreignaffairs.com/united-states/new-approach-arms-control>.

Meacham, S. 2023. “A Race to Extinction: How Great Power Competition Is Making Artificial Intelligence Existentially Dangerous.” *Harvard International Review*. September 8, 2023. <https://hir.harvard.edu/a-race-to-extinction-how-great-power-competition-is-making--rtificial-intelligence-existentially-dangerous/>.

Meier, O., and M. Staack. 2022. *China’s Role in Multilateral Arms Control*. Bonn: Friedrich Ebert Stiftung. <https://library.fes.de/pdf-files/iez/19484.pdf>.

Mozur, P., A. Krolik, and A. Satariano. 2023. “Chinese Traders and Moroccan Ports: How Russia Flouts Global Tech Bans.” *The New York Times*. December 19, 2023. <https://www.nytimes.com/2023/12/19/technology/russia-flouts-global-tech-bans.html?smid=nytcore-android-share>.

Nadibaidze, A., and N. Miotto. 2023. “The Impact of AI on Strategic Stability Is What States Make of It: Comparing US and Russian Discourses.” *Journal for Peace and Nuclear Disarmament* 6 (1): 47–67. <https://doi.org/10.1080/25751654.2023.2205552>.

Nakamura, R. 2023. “U.S. Considers Missile Launch Notification Framework with China.” *Nikkei Asia*. December 11, 2023. <https://asia.nikkei.com/Politics/International-relations/US-China-tensions/U.S.-considers-missile-launch-notification-framework-with-China?s=09>.

Narang, V., and S. D. Sagan, eds. 2022. *The Fragile Balance of Terror: Deterrence in the New Nuclear Age*. Ithaca, NY: Cornell University Press.

NATO. 2021. *Summary of the NATO Artificial Intelligence Strategy*. October 21, 2021. https://www.nato.int/cps/en/natohq/official_texts_187617.htm.

Paul, T. V. 2010. “Taboo or Tradition? The Non-Use of Nuclear Weapons in World Politics.” *Review of International Studies* 36 (4): 853–863. <https://doi.org/10.1017/S0260210510001336>.

Permanent Mission of the People’s Republic of China. 2023. *Working Paper on Nuclear Risk Reduction Submitted by China*. August 9, 2023. http://vienna.china-mission.gov.cn/eng/hyyfy/202308/t20230809_11124098.htm.

Rogers, J., and H. Williams. “The Irreversibility Paradox: What Makes for Enduring Arms Control and Disarmament.” *Journal for Peace and Nuclear Disarmament* 6 (2): 244–262. <https://doi.org/10.1080/25751654.2023.2292812>.

Saltini, A. 2023. “AI and Nuclear Command, Control and Communications: P5 Perspectives.” *The European Leadership Network*. November 2023. https://www.europeanleadershipnetwork.org/wp-content/uploads/2023/11/AVC-Final-Report_online-version.pdf.

Sanger D. E., and J. Tankersley. 2022. “U.S. Warns Russia of ‘Catastrophic Consequences’ If It Uses Nuclear Weapons.” *The New York Times*. September 25, 2022. <https://www.nytimes.com/2022/09/25/us/politics/us-russia-nuclear.html>.

Schelling, T. C. 1960. *The Strategy of Conflict*. Cambridge, MA: Harvard University Press.

Schelling, T. C., and M. H. Halperin. 1961. *Strategy and Arms Control*. New York, NY: The Twentieth Century Fund.

Tannenwald, N. 2007. *The Nuclear Taboo. The United States and the Non-Use of Nuclear Weapons Since 1945*. Cambridge, MA: Cambridge University Press.
<https://doi.org/10.1017/CBO9780511491726>.

United Nations. 2021. *Reducing Space Threats Through Norms, Rules and Principles of Responsible Behaviours, Resolution Adopted by the General Assembly on 24 December 2021*. United Nations General Assembly 76th Session, A/RES/76/231, December 30, 2021.
https://digitallibrary.un.org/record/3952870/files/A_RES_76_231-EN.pdf?ln=en.

United Nations. 2022. *Principles and Responsible Practices for Nuclear Weapon States, Working Paper Submitted by France, the United Kingdom of Great Britain and Northern Ireland and the United States of America*. 2020 Review Conference of the Parties to the Treaty on the Non-Proliferation of Nuclear Weapons. NPT/CONF.2020/WP.70. July 29, 2022.
https://www.un.org/sites/un2.un.org/files/npt_conf.2020_e_wp.70.pdf.

US Department of Defense. 2023. *Military and Security Developments Involving the People's Republic of China 2023. Annual Report to Congress*.
<https://media.defense.gov/2023/Oct/19/2003323409/-1/-1/2023-MILITARY-AND-SECURITY-DEVELOPMENTS-INVOLVING-THE-PEOPLES-REPUBLIC-OF-CHINA.PDF>.

US Department of Defense. 2024. "Pentagon Officials Host Chinese Counterparts for High-Level Talks." January 10, 2024. <https://www.defense.gov/News/News-Stories/Article/Article/3641103/pentagon-officials-host-chinese-counterparts-for-high-level-talks/#:~:text=The%20talks%20are%20designed%2C%20in,communication%20between%20the%20two%20sides>.

US Department of State. 2009–2017a. *Agreement Between the Government of The United States of America and the Government of The Union of Soviet Socialist Republics on the Prevention of Incidents on and Over the High Seas*. <https://2009-2017.state.gov/t/isn/4791.htm>.

US Department of State. 2009–2017b. *Agreement Between the United States of America and The Union of Soviet Socialist Republics on Notifications of Launches of Intercontinental Ballistic Missiles and Submarine-Launched Ballistic Missiles (Ballistic Missile Launch Notification Agreement)*. <https://2009-2017.state.gov/t/avc/trty/187150.htm>.

US Department of State. 2023a. "Assistant Secretary Mallory Stewart's Meeting with the People's Republic of China's (PRC) Ministry of Foreign Affairs Director-General of Arms Control Sun Xiaobo, Media Note." November 7, 2023. <https://www.state.gov/assistant-secretary-mallory-stewarts-meeting-with-the-peoples-republic-of-chinas-prc-ministry-of-foreign-affairs-director-general-of-arms-control-sun-xiaobo/>.

US Department of State. 2023b. *Political Declaration on Responsible Military Use of Artificial Intelligence and Autonomy*. November 9, 2023. <https://www.state.gov/political-declaration--n-responsible-military-use-of-artificial-intelligence-and-autonomy-2/>.

Vabulas, F., and D. Snidal. 2013. "Organization Without Delegation: Informal Intergovernmental Organizations (IIGOs) and the Spectrum of Intergovernmental Arrangements." *The Review of*

International Organizations 8 (2): 193 -220. <https://doi.org/10.1007/s11558-012-9161-x>.

Vaynman, J., and Tristan A. Volpe. 2023. "Dual Use Deception: How Technology Shapes Cooperation in International Relations." *International Organization* 77 (3): 599-632. <https://doi.org/10.1017/S0020818323000140>.

Westerwinter, O., K. W. Abbott, and T. Biersteker. 2021. "Informal Governance in World Politics." *The Review of International Organizations* 16 (1): 1-27. <https://doi.org/10.1007/s11558-020-09382-1>.

White House. 2023a. "Remarks by National Security Advisor Jake Sullivan for the Arms Control Association (ACA) Annual Forum." June 2, 2023. <https://www.whitehouse.gov/briefing-room/speeches-remarks/2023/06/02/remarks-by-national-security-advisor-jake-sullivan-for-the-arms-control-association-aca-annual-forum/>.

White House. 2023b. "Readout of President Joe Biden's Meeting with President Xi Jinping of the People's Republic of China." November 15, 2023. <https://www.whitehouse.gov/briefing-room/statements-releases/2023/11/15/readout-of-president-joe-bidens-meeting-with-president-xi-jinping-of-the-peoples-republic-of-china-2/>.

Wisotzki, S., and U. Kühn. 2021. "Crisis in Arms Control: An Introduction." *Zeitschrift für Friedens- und Konfliktforschung* 10 (2): 183-194. <https://doi.org/10.1007/s42597-022-00074-8>.

Woodruff, J. 2022. "CIA Director Bill Burns on War in Ukraine, Intelligence Challenges Posed by China." *PBS News Hour*. December 16, 2022. <https://www.pbs.org/newshour/show/cia-director-bill-burns-on-war-in-ukraine-intelligence-challenges-posed-by-china>

Zhao, T. 2020. "The Case for China's Participation in Trilateral Arms Control." In *Trilateral Arms Control? Perspectives from Washington, Moscow, and Beijing*, edited by U. Kühn, 68-94. Hamburg: IFSH. https://ifsh.de/file/publication/Research_Report/002/20200224_IFSH_Research_Report_002_final.pdf.

III. ENDNOTES

[1] For a good primer on the philosophical discussion of what it could mean to behave in responsible ways, see Haydon (1978).

IV. NAUTILUS INVITES YOUR RESPONSE

The Nautilus Asia Peace and Security Network invites your responses to this report. Please send responses to: nautilus@nautilus.org. Responses will be considered for redistribution to the network only if they include the author's name, affiliation, and explicit consent

View this online at: <https://nautilus.org/napsnet/napsnet-special-reports/behavioral-arms-control-and-east-asia/>

Nautilus Institute
608 San Miguel Ave., Berkeley, CA 94707-1535 | Phone: (510) 423-0372 | Email:
nautilus@nautilus.org